

Public Health Preparedness and Situational Awareness Report: #2019:05

Reporting for the week ending 02/02/19 (MMWR Week #05)

February 8, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

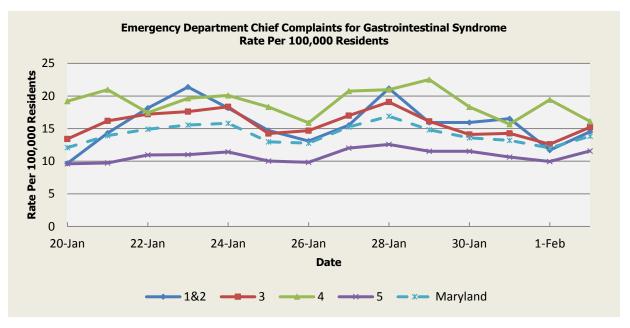
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

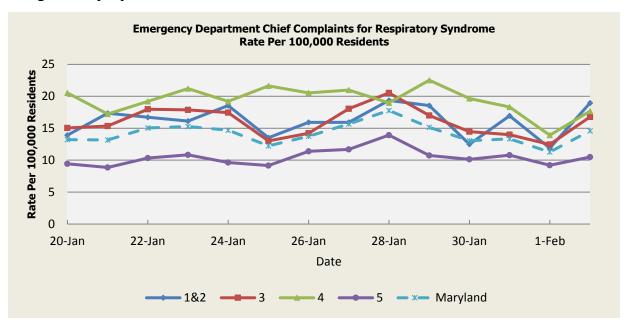


There were three (3) Gastrointestinal Syndrome outbreaks reported this week: three (3) outbreaks of Gastroenteritis in Assisted Living Facilities (Regions 3,4,5).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	13.10	15.04	15.77	10.16	13.06	
Median Rate*	12.91	14.82	15.24	10.04	12.95	

^{*} Per 100,000 Residents

Respiratory Syndrome

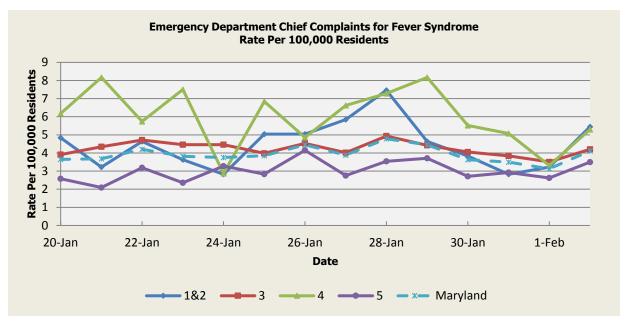


There were eight (8) Respiratory Syndrome outbreaks reported this week: four (4) outbreaks of Influenza in Nursing Homes (Regions 3,4); two (2) outbreaks of Influenza associated with Schools (Regions 1&2,5); one (1) outbreak of Influenza associated with a Daycare Center (Region 3); one (1) outbreak of Influenza/Pneumonia in a Nursing Home (Region 3).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	12.51	14.62	14.90	9.91	12.66		
Median Rate*	12.10	14.07	14.35	9.54	12.20		

* Per 100,000 Residents

Fever Syndrome

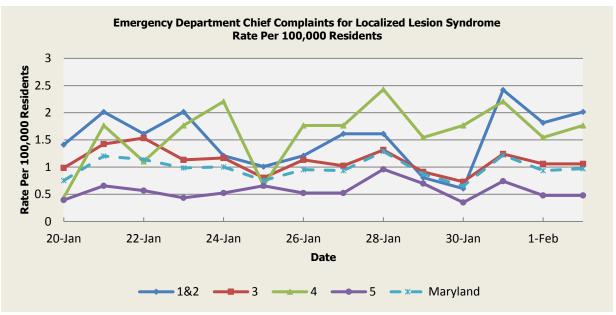


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.03	3.87	4.04	3.02	3.49	
Median Rate*	2.82	3.76	3.97	2.92	3.36	

*Per 100,000 Residents

Localized Lesion Syndrome

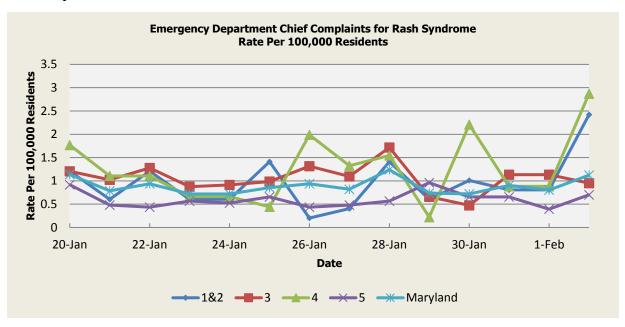


There were no Localized Lesion Syndrome outbreaks reported this week.

_	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.09	1.82	2.04	0.92	1.43	
Median Rate*	1.01	1.75	1.99	0.87	1.37	

^{*} Per 100,000 Residents

Rash Syndrome

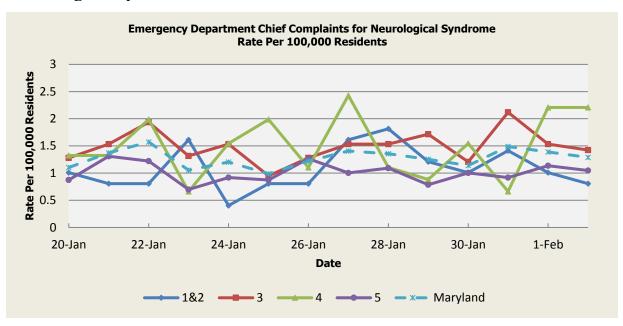


There were no Rash Syndrome outbreaks reported this week

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.22	1.69	1.77	0.99	1.39	
Median Rate*	1.21	1.61	1.77	0.96	1.34	

^{*} Per 100,000 Residents

Neurological Syndrome

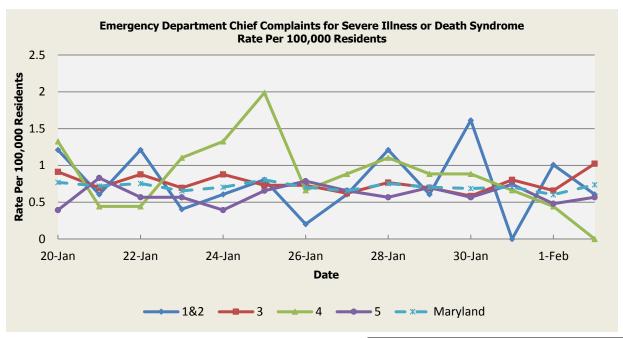


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.75	0.91	0.83	0.57	0.76	
Median Rate*	0.60	0.80	0.66	0.52	0.67	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



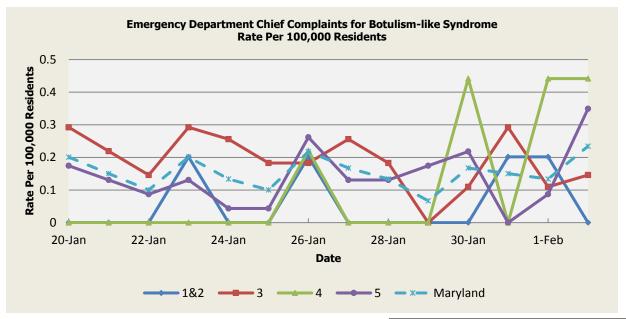
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.66	0.90	0.83	0.50	0.72			
Median Rate*	0.60	0.88	0.66	0.48	0.69			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

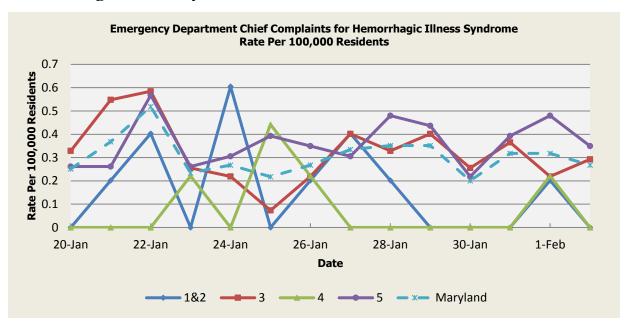


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/20 (Regions 3,5), 1/23 (Regions 1&2,3), 1/24 (Region 3), 1/26 (Regions 1&2,4,5), 1/27 (Region 3), 1/29 (Region 5), 1/30 (Regions 4,5), 1/31 (Regions 1&2,3), 2/1 (Regions 1&2,4), 2/2 (Regions 4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.11	0.05	0.07	0.09	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

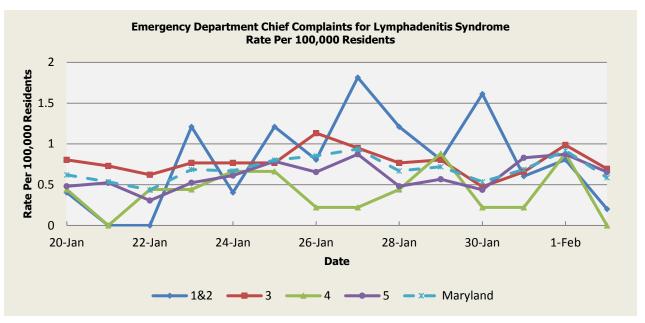


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/20 (Regions 3,5), 1/21 (Regions 1&2,3,5), 1/22 (Regions 1&2,3,5), 1/23 (Regions 4,5), 1/24 (Regions 1&2,5), 1/25 (Region 4,5), 1/26 (Regions 1&2,4,5), 1/27 (Regions 1&2,3,5), 1/28 (Regions 1&2,3,5), 1/29 (Region 5), 1/31 (Regions 3,5), 2/1 (Regions 1&2,4,5), 2/2 (Region 5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.15	0.04	0.12	0.12		
Median Rate*	0.00	0.07	0.00	0.04	0.07		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 1/23 (Regions 1&2), 1/25 (Regions 1&2,5), 1/26 (Regions 1&2), 1/27 (Regions 1&2,5), 1/28 (Regions 1&2), 1/29 (Regions 1&2,4), 1/30 (Regions 1&2), 1/31 (Region 5), 2/1 (Regions 1&2,4,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Maryla						
Mean Rate*	0.35	0.57	0.39	0.36	0.46		
Median Rate*	0.20	0.47	0.44	0.31	0.40		

^{*} Per 100,000 Residents

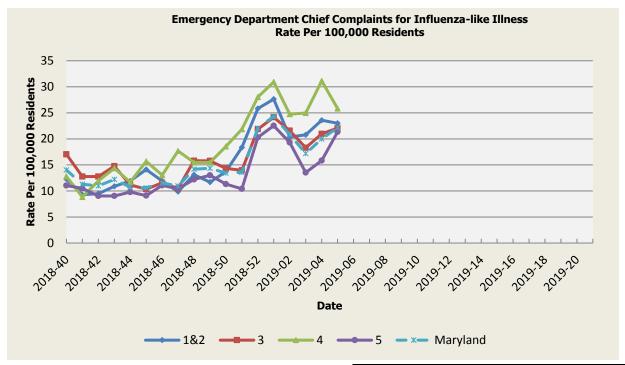
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.
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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 05 was: Low Intensity.

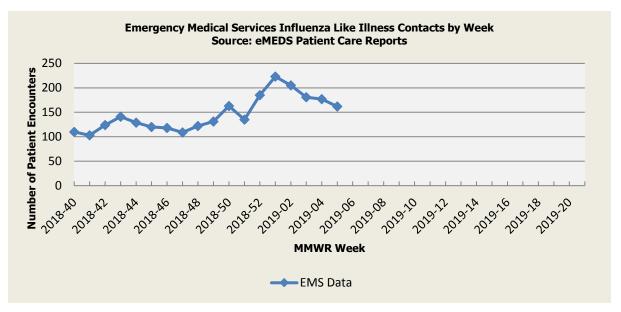
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	9.78	12.98	12.31	10.99	11.90	
Median Rate*	7.66	10.08	9.05	8.56	9.13	

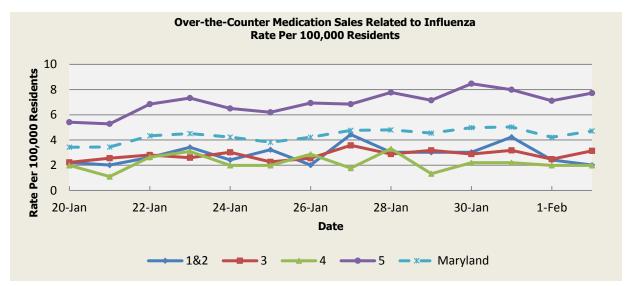
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

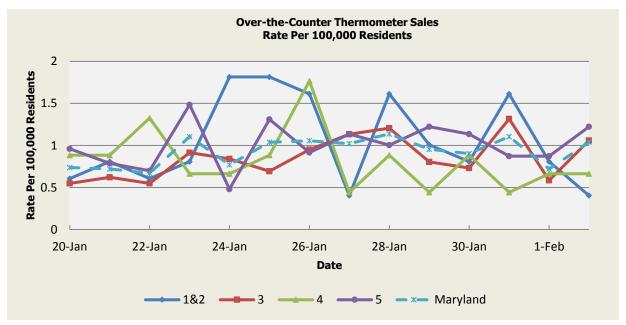


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.67	2.74	8.10	5.75
Median Rate*	3.02	3.95	2.43	7.47	5.09

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

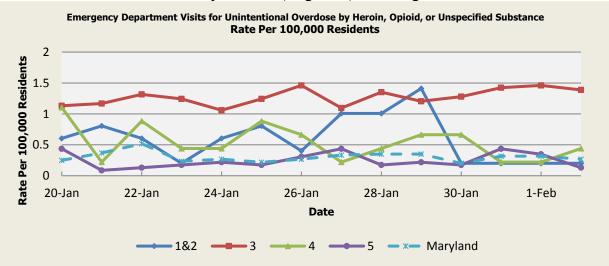
	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.11	2.97	2.35	3.95	3.31
Median Rate*	2.82	2.81	2.21	3.78	3.16

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

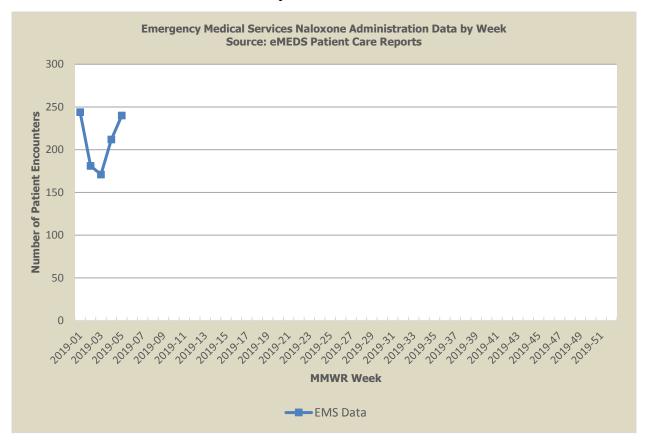
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



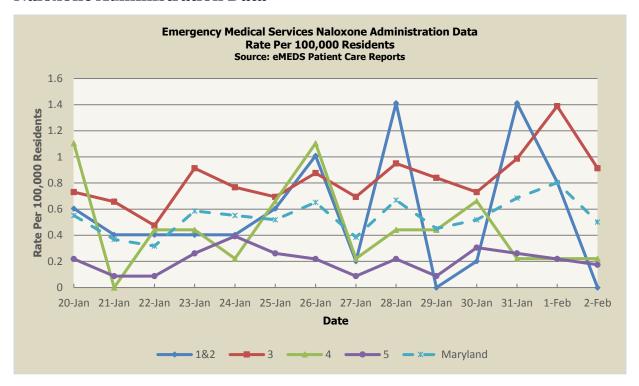
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of February 7, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

AVIAN INFLUENZA, HUMAN (CHINA), 09 Feb 2019, An additional human H9N2 avian influenza case was reported in Mainland China. According to officials, the case was reported in a 2 year-old boy from Changde City, Hunan Province. This is the 7th case reported in China in 2018. In most human cases of H9N2 avian flu, the associated disease symptoms have been mild and there has been no evidence of human-to-human transmission. Influenza A(H9N2) viruses are enzootic in poultry populations in parts of Africa, Asia and the Middle East. Read More: http://www.promedmail.org/post/6295949

NATIONAL DISEASE REPORTS

BOTULISM (ALASKA), 06 Feb 2019, State health officials said they are investigating a man's death and illnesses of 4 others possibly related to botulism following a New Year's Day dinner in Nome where fermented beluga whale flipper and other traditional Alaska Native foods were served. A "big concern" is the aged beluga flipper that has tested "preliminary positive" for a botulism toxin, said Louisa Castrodale, an epidemiologist with the Alaska Department of Health

and Social Services. State officials are awaiting final results from the flipper and other foods served at the family potluck, as well as clinical samples from those who fell ill, Castrodale said. The samples were sent to a lab in Richmond, California. Final results are expected late next week Read More: http://www.promedmail.org/post/6303507

ACUTE FLACCID MYELITIS (NEBRASKA), 05 Feb 2019, Nebraska state health officials say a 4th case of a rare, polio-like illness has been confirmed in the state. The Nebraska Department of Health and Human Services said in a news release [Wed 30 Jan 2019] that the case of acute flaccid myelitis, or AFM, has been confirmed in a child in northeastern Nebraska. No other information about the child has been released. Read More: http://www.promedmail.org/post/6291083

PERTUSSIS (**CALIFORNIA**), 04 Feb 2019, Marin County has been hit by a recent spike in cases of pertussis, better known as whooping cough. Marin County Health Department says there have been 241 confirmed cases of the sickness, which is the highest number the county's seen in 8 years. Read More: http://www.promedmail.org/post/6294469

INTERNATIONAL DISEASE REPORTS

GONOCOCCAL DISEASE (UNITED KINGDOM), 06 Feb 2019, On 7 Jan 2019, the International Health Regulations (IHR) National Focal Point for the United Kingdom of Great Britain and Northern Ireland notified WHO about 2 cases of extensive drug resistant (XDR) _Neisseria gonorrhoeae_ infection diagnosed in the United Kingdom. The 1st case, a heterosexual female who attended sexual health services in the United Kingdom in October 2018. The 2nd case, a heterosexual female who attended sexual health services in the United Kingdom in November 2018. Read More: http://www.promedmail.org/post/6299471

CLASSICAL SWINE FEVER (JAPAN), 06 Feb 2019, Japanese authorities were battling to contain swine flu on Wed (6 Feb 2019) after the virus was detected at multiple sites in central Japan. Japanese soldiers and local government officials began slaughtering around 6600 pigs at a farm in Toyota City in Aichi prefecture following the confirmation of an outbreak of swine fever, also known as hog cholera, there. Since January [2019], the farm has shipped pigs to 6 facilities in Nagano, Gifu, Aichi, Shiga, Mie, and Osaka prefectures, according to the Ministry of Agriculture, Forestry and Fisheries. It said it had found the virus at all the above places except Mie. Read More: http://www.promedmail.org/post/6302083

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

